IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

WSOU INVESTMENTS, LLC D/B/A BRAZOS LICENSING AND DEVELOPMENT,	Case No. 6:21-CV-00128-ADA
Plaintiff,	
v.	JURY TRIAL DEMANDED
CISCO SYSTEMS, INC.,	
Defendant.	

CISCO'S MOTION FOR JUDGMENT ON THE PLEADINGS UNDER RULE 12(C)
AS TO U.S. PATENT NOS. 8,989,216 AND 7,443,859

TABLE OF CONTENTS

TABLE OF AUTHORITIES

TABLE OF AUTHORITIES

TABLE OF ABBREVIATIONS

Abbreviation	Meaning
'216 Patent	U.S. Patent No. 8,989,216
'859 Patent	U.S. Patent No. 7,443,859
'859 Accused Products	Cisco's ASR5500, ASR5700, and Virtual Packet Core products
3GPP	3rd Generation Partnership Project
APN	Access Point Name
AVP	Attribute Value Pair
Cisco	Defendant Cisco Systems, Inc.
Compl.	WSOU's Complaint, Dkt. 1 (Feb. 5, 2021)
Dkt.	Docket Number
GGSN	Gateway GPRS Support Node
GPRS	General Packet Radio System
MS	Mobile Station
PDP	Packet Data Protocol
SGSN	Serving GPRS Support Node
SGSN Administration Guide	*SGSN Administration Guide*, StarOS Release 21.15, *available at* https://www.cisco.com/c/en/us/td/docs/wireless/asr_5000/21-15_6-9/SGW-Admin/21-15-SGSN-Admin.pdf (last accessed Aug. 15, 2022) (Ex. 8)
WSOU	Plaintiff WSOU Investments, LLC d/b/a Brazos Licensing and Development

Table of Exhibits

Exhibit	Document
Ex. 1	U.S. Patent No. 8,989,216
Ex. 2	Excerpt from Samuel Johnson's comprehensive English language dictionary, *available at* https://publicdomainreview.org/collection/samuel-johnson-s-dictionary-of-the-english-language-1785 (last accessed Aug. 31 2022)
Ex. 3	U.S. Patent No. 7,443,859
Ex. 4	06/28/21 Letter from B. Rosenthal
Ex. 5	01/18/22 Letter from B. Rosenthal
Ex. 6	4/29/22 Letter from B. Rosenthal
Ex. 7	Rule 11 Motion
Ex. 8	*SGSN Administration Guide*, StarOS Release 21.15, *available at* https://www.cisco.com/c/en/us/td/docs/wireless/asr_5000/21-15_6-9/SGW-Admin/21-15-SGSN-Admin.pdf (last accessed Aug. 31, 2022)
Ex. 9	Ex. B to WSOU's Infringement Contentions, February 11, 2022
Ex. 10	3GPP TS 29.274 v. 10.0.0
Ex. 11	3GPP TS 23.060 v. 10.0.0

WSOU filed its Complaint on February 5, 2021, asserting, *inter alia*, the '216 and '859 Patents. Compl. ¶¶ 12, 27. Cisco answered on April 19, 2021. Dkt 23. Pursuant to Federal Rule 12(c), Cisco moves for judgment on the pleadings as to the '216 and '859 Patents.

I.   INTRODUCTION

The '216 Patent. The asserted claims of the '216 Patent are directed to the abstract idea of providing context-specific definitions for a given dictionary entry. The alleged innovation of the '216 Patent is to take a conventional "Diameter protocol command dictionary"—a prior art dictionary which defines the format of commands for use in the Diameter networking protocol— and improve it by providing alternative definitions that are context-specific. That alleged innovation—even if new—is not a technical solution to a technical problem. Instead, it merely applies an abstract idea that is fundamental to any conventional dictionary. For example, the word "court" is defined to mean a judicial tribunal (like a district *court*) in one context, but is also defined to mean a defined area for a game (like a basketball *court*) or to seek affection (such as to *court* for marriage). There is nothing technological about context-specific dictionary definitions, and indeed they have been around for centuries, since the very earliest dictionaries.

The asserted claims of the '216 Patent recite no more than this basic and abstract idea. The patent does not purport to claim new network devices or protocols, nor any new components. The claims instead simply recite using well-known, generic network components and a well-known, standardized protocol with commands that may have different definitions depending on the context. And WSOU has not alleged otherwise. To the contrary, during claim construction, WSOU argued that each and every limitation was subject to its "plain and ordinary meaning." Judgment of ineligibility is thus appropriate because claims like these, which take an abstract idea and simply say "apply it" on well-known computing devices, are not patent-eligible.

The '859 Patent. WSOU's infringement theory, as set forth in its Complaint, fails as a

1

matter of law, particularly after this Court's claim construction. Cisco has tried in vain for months

to get WSOU to drop the '859 Patent, but to no avail. Judgment on the pleadings should be granted

because WSOU's frivolous infringement allegations, even taken as true, fail to satisfy the plain

claim language, especially as construed.

Each asserted claim of the '859 Patent recites specific messages and data fields exchanged

in a General Packet Radio System ("GPRS") cellular network.   One standard data field in

particular—the Access Point Name ("APN") field—is recited *by name* in the asserted claims. The

alleged claimed innovation of the '859 Patent is to add specific information to the APN field to

identify whether a mobile station should receive a public or private network address.

WSOU's infringement allegations fail because WSOU does not even *allege* that the APN

field in the accused products includes information identifying whether the mobile station should

receive a public or private address, as required by each claim. To the contrary, the pleadings show

that the APN field has no such information. WSOU's Complaint instead relies on information

found in an *entirely different field*—called the "*Maximum* APN *Restriction*" field—which

indisputably does not meet the Court's claim construction. Indeed, the field WSOU relies on does

not even appear in the messages required by certain of the claims. Because WSOU's Complaint

has no plausible allegation of infringement of the '859 Patent—and the pleadings instead

demonstrate *non*-infringement—the Court should grant judgment on the pleadings.

II.   LEGAL STANDARD

Before bringing a patent infringement action, a plaintiff must conduct "a good faith,

informed comparison of the claims of a patent against the accused subject matter." *Q-Pharma,*

Inc. v. Andrew Jergens Co., 360 F.3d 1295, 1302 (Fed. Cir. 2004). The plaintiff must show "the

accused product or process contain elements identical or equivalent to each claimed element of the

patented invention." *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 40 (1997).

"A motion for judgment on the pleadings under Rule 12(c) is subject to the same standard as a motion to dismiss under Rule 12(b)(6)." *Doe v. MySpace, Inc.*, 528 F.3d 413, 418 (5th Cir. 2008); *Lighthouse Consulting Grp. LLC v. BB&T Corp.*, 476 F. Supp. 3d 532 (W.D. Tex. 2020) (dismissing infringement claims on Rule 12(c) motion). Judgment on the pleadings should be granted if a complaint fails to "plead 'enough facts to state a claim to relief that is plausible on its face.'" *MySpace*, 528 F.3d at 418 (citation omitted). In deciding a motion under Rule 12(c), the Court can consider "the substance of the pleadings and any judicially noticed facts." *Great Plains Trust Co. v. Morgan Stanley Dean Witter and Co.*, 313 F.3d 305, 312 (5th Cir. 2002). In addition, "any documents expressly referenced in a complaint and attached to that pleading become a part of the pleading for purposes of a Rule 12(c) motion." *Raybourne and Dean Consulting Ltd. v. Metrica Inc.*, 2015 WL 12866214, at *5 (W.D. Tex. Apr. 10, 2015); *see also Med RXSystems PLLC v. Tex. Dep't of State Health Serv.*, 633 Fed. App'x 607, 610 n.4 (5th Cir. 2016) (considering "vendor agreements and letters between the parties in support of [a] Rule 12(c) motion. Plaintiff's complaint refers to these documents in detail.").

Determining patent eligibility is a two-step legal inquiry. Step One asks whether the claims are directed to an ineligible "concept[]," such as an "abstract idea." *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014). If so, Step Two asks whether the claims involve a specific "inventive concept" that "amounts to significantly more than a patent upon the [abstract idea] itself." *Id.* at 218. Patent eligibility is properly resolved on a Rule 12(c) motion "based on intrinsic evidence from the specification without need for 'extraneous fact finding outside the record.'" *See SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018).

III.   THE '216 PATENT CLAIMS ARE NOT PATENT-ELIGIBLE

The asserted claims of the '216 Patent recite nothing more than applying to a conventional Diameter protocol dictionary the centuries-old abstract idea of including context-specific definitions for a dictionary entry. The claims add nothing inventive to that abstract idea.

A.   The '216 Patent

The '216 Patent, entitled "Diameter Versioning Dictionary," generally relates to a Diameter protocol command dictionary that enables a device to operate with different versions of the 3GPP standards. *See* Ex. 1 ('216 Patent) at 1:6-10, 1:54-55. In the "Background" section, the patent explains that Diameter is a well-known networking protocol used by the 3rd Generation Partnership Project ("3GPP") standard group. Standards have been used for generations to ensure product interoperability.   As the patent explains, network nodes that communicate using the Diameter protocol use a "Diameter dictionary" to determine the format of different Diameter commands and Attributed Value Pairs (AVPs),[1] so that the nodes can correctly send and receive messages. *Id.* at 1:37-39. Because 3GPP standards change over time, the command and AVP definitions may vary depending on the version of a 3GPP standard a dictionary supports.

According to the patent, using different Diameter dictionaries for different 3GPP standard releases can lead to incompatibility issues because "different network nodes running different versions of a major release can include not only different definitions of an AVP but also the behavior or implementation of various commands." *Id.* at 1:39-45. To solve this alleged deficiency, the two-page specification describes a Diameter dictionary with "context-specific" definitions of commands and AVPs depending on the 3GPP version. *Id.* at 1:53-63. Providing context-specific definitions is the alleged advance over the admitted prior art.

---

[1] AVPs are defined by the standards as a field—such as a parameter for a particular command—in the Diameter message. *E.g.*, '216 Patent, 1:32-35 (citing RFC 3588).

WSOU asserts '216 Patent claims 1, 2, 4, 5, 7, 9, and 11-14. Claim 1 is representative:

1. A tangible non-transitory storage device readable by a machine, embodying a
   Diameter protocol command dictionary comprising:

>   a first definition for a Diameter protocol command,
>>   wherein said Diameter protocol command is defined by a ***first
>>   default definition***
>>   unless a first context applies in which case said command is
>>   defined by a ***context-specific definition***,
>   and the Diameter protocol command dictionary ***supports multiple versions
>   of a standard***,
>   a second definition for a Diameter protocol attribute value pair (AVP),
>>   wherein said Diameter protocol or AVP is defined by a ***second
>>   default definition***
>>   unless a second context applies in which case said AVP is defined
>>   by a ***second context-specific definition***,
>   wherein said Diameter protocol command dictionary interoperates with a
>   Diameter protocol stack to perform functions for processing Diameter
>   messages.

Claims 4 and 11 (the other independent claims) claim network nodes that utilize use the

Diameter dictionary, rather than a storage device, but are otherwise substantively identical. The

dependent claims recite little more: claims 2 and 5 specify the 3GPP standard versions as the

specific contexts, claims 7 and 9 recite that contexts can be both major and minor releases of

the standards, claims 12 and 13 require two context-specific definitions, and claim 14 allows

the version to be identified by its version number or its release date. Thus, claim 1 is

representative of all Asserted Claims for purposes of eligibility. *See* Appendix A*; Health

Discovery Corp. v. Intel Corp.*, No. 6:20-cv-666-ADA (W.D. Tex. Dec. 27, 2021) Dkt. 66, at 7-

8 (holding a claim to be representative because "it, like the other asserted claims, encapsulates

[the abstract idea] and recites little, if anything, more than that").

B.   Claim Construction

At claim construction, the parties disputed three terms for the '216 Patent: "context," "said

specific context/said context," and "said command or AVP is defined by a second default

definition." The parties ultimately stipulated that "context" has its "plain and ordinary meaning

(i.e., the situation in which a default definition or a standard does not apply)." Dkt. 45. The Court

found the term "said specific context/said context" in dependent claims 2, 5, 7, and 9 to be

indefinite for lack of antecedent basis (although WSOU oddly continues to assert them). Dkt. 50.

The Court corrected the term "said command or AVP is defined by a second default definition" in

dependent claim 4 to "said AVP is defined by a second default definition." *Id.*

C.   **The Asserted Claims of the '216 Patent Are Not Eligible for Patenting**

The '216 claims are directed to the abstract idea of context-specific dictionary entries and

recite no inventive concept that would make them eligible. Nor are there any factual allegations

which, taken as true, could preclude judgment.

1.   ***Alice* Step One: The '216 Claims are Directed to an Abstract Idea**

The '216 claims are directed to the abstract idea of context-specific dictionary definitions.

This idea is centuries old, and is used in virtually every traditional dictionary.[2] For example, the

word "court" has many different definitions for the legal, sports, and romantic contexts. Similarly,

the word "pen" means a writing instrument, or an enclosure, depending on the context. The '216

claims simply apply this conventional, abstract idea to Diameter protocol dictionaries.

To determine whether a claim is directed to an abstract idea, courts "look at the focus of

the claimed advance over the prior art to determine if the claim's character as a whole is directed to

excluded subject matter."   *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257

---

[2] Indeed, Samuel Johnson's comprehensive English language dictionary, the first of its kind published in the 1700s, was replete with context-sensitive definitions, including for the word "court."   Ex. 2 (https://publicdomainreview.org/collection/samuel-johnson-s-dictionary-of-the-english-language-1785).

(Fed. Cir. 2016) (emphasis added).[3]   Here, the patent explains that prior art network nodes "typically use a Diameter command dictionary to provide the format of commands and Attribute Value Pairs (AVPs)." '216 Patent at 1:37-49. The patent asserts that each dictionary was specific to a particular version of a 3GPP standard and would provide only the definition of a command or AVP for that version of the standard, and therefore nodes using different versions of the standard (and thus different dictionaries) would have "[i]ncompatibility issues." *Id.* To solve this purported deficiency, the patent claims providing context-specific definitions for several versions of a standard. *Id.* at 1:53-2:5; *id.* at 3:17-19. Thus, providing different definitions to use depending upon the context—an abstract idea—is the focus of the claimed advance over the prior art.

Nothing else in the claims changes the focus. Claim 1 simply stores the Diameter protocol dictionary file on a "tangible non-transitory storage device readable by a machine." *Id.* at 5:9. Claims and 4 and 11 claim "a network node comprising" the Diameter protocol dictionary file. *Id.* at 5:30; *Id.* at 6:16. Claiming a physical device in addition to the context-specific dictionary definitions cannot save the '216 Patent, however, as "[w]holly generic computer implementation is not generally the sort of 'additional featur[e]' that provides any 'practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.'" *Alice Corp.* 573 U.S. at 223–224 (internal citations omitted). This is exactly the case here, as the alleged advance of the claims is simply the idea of context-specific dictionary definitions.

The abstract idea here is even more basic, abstract, and non-technical than in a host of cases in which the Federal Circuit held claims to be ineligible. For example, in *Intellectual Ventures*, the Federal Circuit held claims that recited creating an index and "using that index to search for

---

[3] Similarly, if one looks at the claims as a whole, the claims are solely focused on context-sensitive definitions. *See Elec. Power Gp., LLC v. Alstom SA*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).

and retrieve data" to be drawn to an abstract idea. *Intellectual Ventures v. Erie Indemnity*, 850 F.3d 1315, 1327 (Fed. Cir. 2017). This is because "organizing and accessing records through the creation of an index-searchable database [] includes longstanding conduct that existed well before the advent of computers and the Internet." Here, the claims do not purport to create a new kind of database—instead seeking to improve prior art protocol dictionaries—and the idea of organizing multiple context-specific definitions into one dictionary entry has existed long before computers, in conventional paper dictionaries. Moreover, associating a context to the context-specific definition is not only how all dictionaries work, it is very similar to the indexing the court held to be abstract in *Intellectual Ventures*. *Id.* at 1326. Both an index and a dictionary are structures that "merely collect, classify, or otherwise filter data," and claims directed thereto are ineligible. *Id.*

Similarly, in *BSG Tech. LLC v. Buyseasons, Inc.*, the court held other claims to an index for organizing a database to be ineligible. 889 F.3d 1281, 1286 (Fed. Cir. 2018). The claims in *BSG Tech* involved using historical usage information of the index tags while inputting new data. The claims were abstract because, although the "claimed invention results in better user input, [] the database serves in its 'ordinary capacity' of storing the resulting information." *Id.* at 1288; *see also Voter Verified, Inc. v. Election Sys. & Software LLC*, 887 F.3d 1376, 1385 (Fed. Cir. 2018) (holding claims ineligible where "[h]umans have performed this fundamental activity . . . for hundreds of years"); *Intellectual Ventures*, 850 F.3d 1315 (holding claims ineligible that were directed to an index-searchable database); *FairWarning IP, LLC v. Iatric Systems, Inc.*, 839 F.3d 1089, 1094 (Fed. Cir. 2016) (holding that the "claims merely implemented an old practice in a new environment" and were therefore directed to an abstract idea). Here, even if it results in fewer compatibility issues, the Diameter command dictionary is simply serving in its "ordinary capacity" as a dictionary by storing context-specific definitions. *See id.*

8

2.   *Alice* Step Two: The '216 Claims Contain No Inventive Concept

At Step Two, the Court "must examine the limitations of the claims to determine whether the claims contain an 'inventive concept' to 'transform' the claimed abstract idea into patent eligible subject matter." *Ultramercial, Inc. v. Hulu*, LLC, 772 F.3d 709, 715 (Fed. Cir. 2014) (quoting *Alice*, 573 U.S. at 221).   Because the Federal Circuit has "repeatedly held" that "invocations of computers and networks that are not even arguably inventive are 'insufficient to pass the test of an inventive concept,'" *Elec. Power Grp.*, 830 F.3d at 1355, part of the inquiry at Step Two is to determine whether the claims "require[] anything other than conventional computer and network components operating according to their ordinary functions." *Two-Way Media v. Comcast Cable*, 874 F.3d 1329, 1341 (Fed. Cir. 2017).   Here, there is no inventive concept in the claims that renders them "significantly more" than a patent on the abstract idea of a context-specific dictionary definition.   The limitations simply recite admittedly well-known components used for their customary purpose.   Each portion of claim 1 is addressed below.

"A tangible non-transitory storage device readable by a machine, embodying a Diameter protocol command dictionary comprising":   According to the background section of the patent, prior art network nodes already used Diameter command dictionaries to format commands and AVPs.   '216 Patent at 1:35-39.   The use of an admittedly well-known Diameter dictionaries for their usual purpose cannot provide an inventive concept.   *See Smart Sys. Innovations, LLC v. Chicago Trans Auth.*, 873 F.3d 1364, 1375 (Fed. Cir. 2017) (claims that "recite the abstract idea of collecting financial data using generic computer components . . . offer no inventive concept.").

"*a first definition for a Diameter protocol command, wherein said Diameter protocol command is defined by a first default definition unless a first context applies in which case said command is defined by a context-specific definition"*:   This limitation is the abstract idea itself:

context-specific dictionary entries where the default definition applies unless the context-specific definition applies.   Abstract ideas cannot provide the inventive concept. *See Berkheimer v. HP Inc.*, 890 F.3d 1369, 1374 (Fed. Cir. 2018) ("[T]he 'inventive concept' cannot be the abstract idea itself, and *Berkheimer* and *Aatrix* leave untouched the numerous cases from this court which have held claims ineligible because the only alleged 'inventive concept' is the abstract idea.").

"and the Diameter protocol command dictionary supports multiple versions of a standard":   This limitation is not an inventive concept, but rather the consequence of implementing abstract idea of context-specific dictionary definitions. *See BSG Tech LLC*, 899 F.3d at 1290 (finding patent that results in "unconventional features that provide benefits over conventional prior art databases" for an invention as a whole still ineligible).

"a second definition for a Diameter protocol attribute value pair (AVP), wherein said Diameter protocol or AVP is defined by a second default definition unless a second context applies in which case said AVP is defined by a second context-specific definition":   This limitation again recites the abstract idea itself: context-specific dictionary entries, but with regard to AVPs definitions rather than command definitions. *See Berkheimer*, 890 F.3d at 1374.

"wherein said Diameter protocol command dictionary interoperates with a Diameter protocol stack to perform functions for processing Diameter messages":   This limitation cannot be the inventive concept because it recites prior art technology. As explained in the background of the patent, prior art Diameter dictionaries provided the format of commands and AVPs in order to properly process Diameter messages. *Id*.

Claims 4 and 11, the other independent claims, simply recite the network nodes that utilize the Diameter protocol command dictionary, rather than a storage device, and do not provide an inventive concept for the same reasons. *Id.*

10

The dependent claims likewise fail to recite an inventive concept:

Claims 2, 5, 7, and 9 have already been held indefinite and should not still be asserted. Dkt. 50 at 3. In any event, they merely specify that the claimed context is a specific version of a 3GPP standard (including a major or minor release, for claims 7 and 9). These claims cannot provide an inventive concept because they merely limit the abstract idea to particular conventional technology. *Bilski v. Kappos*, 561 U.S. 593, 610-11 (2010) ("[T]he prohibition against patenting abstract ideas 'cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.'") (citation omitted); *A Pty Ltd. v. Google, Inc.*, 149 F. Supp. 3d 754, 761 (W.D. Tex. 2016) ("[A] field of use limitation does not make an idea non-abstract.").

Claims 12 and 13 require a second context-specific definition in addition to the first context-specific definition. This does not change the abstract idea; conventional dictionaries often have several definitions for an entry, depending on the context. And "merely repeat[ing] the abstract idea" cannot supply an inventive concept. *In re Rudy*, 956 F.3d 1379, 1385 (2020).

Claim 14 allows the context to be identified by a Diameter version number or release date. This again merely limits the abstract idea to particular conventional technology, which is insufficient to supply an inventive concept. *A Pty Ltd.*, 149 F. Supp. 3d at 761.

3.   There Are No Factual Allegations That Could Preclude Judgment

A claim may be held ineligible on the pleadings where, as here, the specification admits that the recited claim elements beyond the abstract idea are "well-understood, routine and conventional." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 890 F.3d 1354, 1357 (Fed. Cir. 2018) ("Relying on the specification alone may be appropriate where, as in *Mayo*, the specification admits as much."). Here, the patent disclosure itself establishes that all claim limitations beyond the abstract idea itself simply recite well-known, generic components used for

11

their intended purpose. *See, e.g.*, '216 Patent 1:35-42. Moreover, the Complaint does not include any factual allegations regarding inventive concept or anything else pertinent to the eligibility inquiry that could preclude judgment on the pleadings. Compl. ¶¶ 7–21.

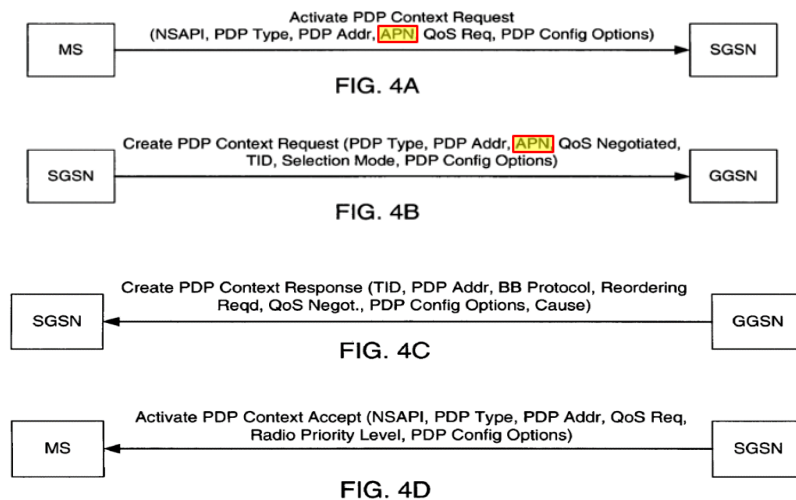## IV.   THE COURT SHOULD GRANT JUDGMENT OF NON-INFRINGEMENT ON THE PLEADINGS WITH RESPECT TO THE '859 PATENT

WSOU's infringement allegations for the '859 Patent were fatally flawed from the beginning, as the Complaint does not plausibly plead infringement. But even if there was some glimmer of a basis to file the Complaint—there was not—the Court's claim construction doomed WSOU's infringement case as a matter of law. WSOU should have dropped its allegations right then, given its complete lack of basis to proceed. But it refused to do so. Thus, Cisco is now forced to request judgment on the pleadings for these frivolous allegations.

Every claim requires specific information—an explicit request for a public or private IP address—be contained in the APN field of certain standardized messages. But WSOU simply does not allege that the APN field contains this information. Nor could it. The incorporated standards, on which WSOU's complaint is based, make clear that the APN field does not include the claimed information. WSOU's allegations—which rely on an entirely different field called "Maximum APN Restriction"—contradict the Court's claim construction. Because WSOU does not allege the APN field of the accused products contains the claimed information—and the pleadings show that the APN field does ***not*** have it—WSOU fails to plausibly allege infringement.

A.   The '859 Patent

The '859 Patent purports to improve upon certain standardized messages in a GPRS network. As the patent explains, to request and obtain access to a GPRS network, a mobile station (*i.e.*, cell phone) exchanges messages with servers in the GPRS network, like the GGSN and SGSN. The standard GPRS protocol includes a series of four messages, which are recited by name

in the claims: (1) the Activate PDP Context Request message; (2) the Create PDP Context Request

message; (3) the Create PDP Context Response message; and (4) the Activate PDP Context Accept

message. These messages and their directionalities are shown in Figures 4A-4D of the '859 Patent:

Ex. 3 ('859 Patent) at FIGS. 4A-4D (annotations added). As depicted, the phone (MS) sends an

Activate PDP Context Request message to the SGSN, and the SGSN in turn sends a Create PDP

Context Request message to the GGSN. As highlighted above in yellow, the Activate PDP Context

Request message and the Create PDP Context Request message each include the "APN" field.

But, as the '859 Patent explains, they "do[] not specify whether private or public IP addresses are

assigned to a requesting [mobile station]." '859 Patent at 3:47-49; *see also id.* at 5:21-27.

The '859 Patent purports to improve on the GPRS standard by including additional

information—*not already required by the existing standard*—in the already-existing APN field.

Specifically, the '859 Patent claims adding information into the APN field that "explicitly indicates

requesting either a private network address or a public network address to be assigned." '859

Patent at claims 1, 9. The addition of this new information to the existing APN field is the alleged

invention. Each asserted claim recites the APN field by name, in either the Activate PDP Context

Request or the Create PDP Context Request, and recites that the APN field must contain

information that "explicitly indicates requesting either a private network address or a public network address to be assigned." *Id.*

WSOU asserts claims 1-3, 7, 9, 11, 15, 16, 22, and 24 of the '859 Patent. Claim 1 is representative, and recites the Activate PDP Context Request message in which the "APN" field identifies whether a public or private address should be assigned:

1. A method comprising:

receiving an Activate Packet Data Protocol (PDP) Context Request message at a Serving General Packet Radio System (GPRS) Support Node (SGSN) of a network from a mobile station of the network, *the Activate PDP Context Request message having an APN (Access Point Name) field containing information that explicitly indicates requesting either a private network address or a public network address to be assigned to the mobile station*; . . . .

'859 Patent at claim 1 (emphasis added). Asserted claims 2, 3, 7, 11, 15, 16, and 24 also recite this Activate PDP Context Request message with the "APN" field having this information.

Other asserted claims recite the Create PDP Context Request message in which the APN field specifies a public or private address, such as claim 9:

9. A method comprising:

receiving a Create Packet Data Protocol (PDP) Context Request message from a Serving General Packet Radio System (GPRS) Support Node (SGSN) at a Gateway General Packet Radio System (GPRS) Support Node (GGSN), *the Create PDP Context Request Message having an APN (Access Point Name) field containing information that explicitly indicates requesting either a private network address or a public network address to be assigned to a mobile station of the network*; . . . .

'859 Patent at claim 9 (emphasis added). Asserted claims 2, 3, 16, and 22 also recite the APN field of the Create PDP Context Request message.

B. The '859 Patent Accused Products

WSOU's Complaint alleges that Cisco's ASR5500, ASR5700, and Virtual Packet Core products ("the '859 Accused Products") infringe every claim of the '859 Patent. In an attempt to

14

meet the claim limitation requiring the APN field to contain information "that explicitly indicates requesting either a private network address or a public network address to be assigned," the Complaint points to an "APN Restriction Value." Compl., ¶¶ 28-29. But WSOU does not and cannot allege this information is contained in the APN field as required by the claims. Instead, the "APN Restriction Value" WSOU relies on appears only in the separate and different "Maximum APN Restriction" field, *see infra* Section IV.E.1, which is not the APN field recited in the claims.

C. The Court Rejected WSOU's Claim Construction Argument

During claim construction, the parties disputed whether the terms "APN (Access Point Name) field" and "APN field" could be satisfied by a variety of different fields (WSOU's position, Dkt. 43 at 1) or are instead limited to the specific field identified as "Access Point Name" (or "APN") that contains the name of the access point (Cisco's position, Dkt. 40 at 1). On December 17, 2021, this Court rejected WSOU's position and construed the terms to mean "[t]he *specific field identified as 'Access Point Name'* that *contains at least the name of the access point*." Dkt. 50 at 2 (emphasis added). Thus, under the Court's construction, the claimed "APN field" cannot be satisfied by the "Maximum APN Restriction" field, for two reasons: (1) that field is *not* the "specific field identified as 'Access Point Name,'" but rather is a different "specific field" identified as "Maximum APN Restriction," and (2) as discussed further below, it does not contain "the name of the access point," both of which are required by the Court's construction.

D. WSOU's Continued Baseless Assertion of the '859 Patent

On June 28, 2021, upon receipt of WSOU's Preliminary Infringement Contentions, Cisco wrote to WSOU identifying, *inter alia*, deficiencies in WSOU's infringement positions as to the '859 Patent. Ex. 4 (06/28/21 Letter from B. Rosenthal). WSOU failed to respond on the substance. After the claim construction hearing confirmed the baselessness of WSOU's view of the claims,

on January 18, 2022, Cisco again wrote to counsel for WSOU requesting that WSOU withdraw its

infringement allegations as to the '859 Patent.   Ex. 5 (01/18/22 Letter from B. Rosenthal).

Receiving no response, Cisco notified WSOU of its intent to seek Rule 11 sanctions for WSOU's

continued assertion of the '859 Patent on April 29, 2022, attaching Cisco's proposed motion.   Ex.

6 (4/29/22 Letter from B. Rosenthal); Ex. 7 (Rule 11 Motion).   WSOU never responded.   To date,

WSOU has not withdrawn its claim or sought to amend its pleadings.

> **E.** **The Court Should Grant Judgment on the Pleadings Because WSOU Fails To Plausibly Allege Infringement of the '859 Patent**

> **1.** **WSOU'S APN Restriction Allegations Fail to State a Claim**

WSOU fails plausibly to allege that the APN field in the accused products "explicitly

indicates requesting either a private network address or a public network address to be assigned,"

as required the claims.   '859 Patent at claims 1 & 9.   Although there is an APN field in the accused

messages, WSOU does not accuse it because it does not contain the information required by the

claims.   Instead, WSOU relies on the contents of a "Maximum APN Restriction" field, which is

different from the APN field recited in the claims and does not meet the Court's construction.

WSOU's Complaint relies entirely upon an "APN restriction value" to allege that the

accused messages contain "information that explicitly indicates requesting either a private network

address or a public network address to be assigned," as required by the claims:

> To resolve received APNs in a PDP activation request message, the SGSN sends a Create PDP context request ("DNS query") to the GGSN.   The SGSN, in turn, sends *an APN restriction* value in the Create PDP context request for establishing a PDP context.   *The APN restriction value defines the type of APN access, whether private or public.*

> Further, the method practiced by the '859 Accused Products comprises sending an Activate PDP Context Accept message to the mobile station containing information assigning one of a private network address and a public network address to the mobile station based on the information contained in the APN field of the Activate PDP Context Request message.   The SGSN sends an Activate PDP context to

accept message to user equipment/mobile stations along with the IP address based on the successful GGSN resolution of the DNS query *by utilizing APN restriction value.* After verifying the APN restriction values, the GGSN creates the PDP context and sends a create response message back to the SGSN containing the IP address assigned to the user equipment/mobile station. The SGSN then sends an Activate PDP Context Accept message to the user equipment/mobile station.

Compl., ¶¶ 28-29.[4] But while WSOU alleges "[t]he APN restriction value defines the type of APN access, whether private or public," WSOU never alleges the value is found in the APN field, as it would have to be to satisfy the claim. *Id.*, ¶ 28. That is because the APN field does not contain any such information. As shown below, the APN field in the accused messages contains only the access point name itself—not any of the other information required by the claims. Conversely, the "APN restriction value" WSOU relies on is found only in a "Maximum APN Restriction" field, which is different from the APN field recited and does not meet the Court's construction.[5]

To support its allegations, WSOU cites Cisco's SGSN Administration Guide in the Complaint. *Id.* The SGSN Administration Guide in turn cites and incorporates certain 3GPP specifications. Ex. 8 at 186 ("The APN Restriction feature complies with the following standards: 3GPP TS 23.060 (version 10); 3GPP TS 29.274 (version 10)"). These documents are therefore properly considered on a 12(c) motion. *Med RXSystems*, 633 Fed. App'x at 610 n.4 (documents appropriately considered on a 12(c) motion where the "complaint refers to these documents in detail"); *Sivertson v. Citibank, N.A.*, 390 F. Supp. 3d 769, 779 (E.D. Tex. 2019) (affidavit cited within security instrument relied upon by complaint properly considered on motion to dismiss).[6]

---

[4] Though not necessary to resolve this motion, WSOU set forth the same exact theory in its final infringement contentions. *See* Ex. 9 at 2-3.

[5] The APN Restriction field also does not provide "information that explicitly indicates requesting either a private [or public] network address," but that is not the subject of this motion.

[6] The claims also reference the GPRS standard, and a standard referenced in claim term "is treated as intrinsic evidence." *LG Elecs., Inc. v. Bizcom Elecs., Inc.*, 453 F.3d 1364, 1375 (Fed. Cir. 2006).

The cited 3GPP specifications establish that the accused messages have an APN field, but it does not "contain[] information that explicitly indicates requesting either a private [or public] network address," as required by the claims. For example, Figure 8.6-1 and the accompanying text establish that the APN field is the "specific field identified as 'Access Point Name'" and "contains at least the name of the access point," as the Court's construction requires:

8.6   Access Point Name (APN)

Access Point Name (APN) is transferred via GTP tunnels. The sending entity copies the value part of the APN into the Value field of the APN IE.

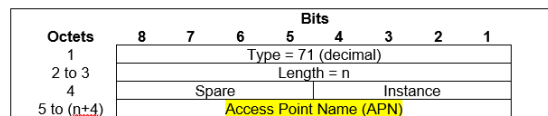| Octets	Bits 8	7	6	5	4	3	2	1
1	Type = 71 (decimal)							
2 to 3	Length = n							
4	Spare				Instance			
5 to (n+4)	Access Point Name (APN)							

Figure 8.6-1: Access Point Name (APN)

The encoding the APN field follows 3GPP TS 23.003 [2] subclause 9.1. The content of the APN field shall be the full APN with both the APN Network Identifier and APN Operator Identifier being present as specified in 3GPP TS 23.003 [2] subclauses 9.1.1 and 9.1.2, 3GPP TS 23.060 [35] Annex A and 3GPP TS 23.401 [3] subclauses 4.3.8.1.

3GPP TS 29.274 (Ex. 10) at 124-25 ("The content of the APN field shall be the full APN…"); *see also* 3GPP TS 23.060 (Ex. 11) at 187 ("Access Point Name is a logical name referring to the packet data network and/or to a service that the subscriber wishes to connect to."). This disclosure also shows the contents of each bit of the APN field and confirms that the field contains merely the access point name and not any of the other information required by the claims. *Id.*

The same documents also show the "APN restriction value" WSOU relies on is found in a separate and different "Maximum APN Restriction" field, which does not satisfy the claims. "APN" and "Maximum APN Restriction" are defined as ***different*** information elements:

Information elements	P	Condition / Comment	IE Type	Ins.
. . .				
Access Point Name (APN)	M		APN	0
. . .				
Maximum APN Restriction	C	This IE shall be included on the S4/S11 and S5/S8 interfaces in the E-UTRAN initial attach, PDP Context Activation and UE Requested PDN connectivity procedures.	APN Restriction	0

3GPP TS 29.274 (Ex. 10) at 29-31; *see also* 3GPP TS 23.060 (Ex. 11) at 188 (identifying "Access

18

Point Name" and "Maximum APN Restriction" as separate fields within the Create PDP Context Request message). Moreover, the "Maximum APN Restriction" field is not the APN field recited in the claims and does not meet either of the two requirements set out in the Court's construction. First, it is not the "specific field identified as 'Access Point Name'" (Dkt. 50 at 2), but rather a different field identified by a different name. Second, it does not "contain at least the name of the access point" (*id.*)—instead, it contains an "APN Restriction" value, which is not the name of an access point, but rather an integer between 0 and 4 indicating a level of restriction:

8.57   APN Restriction

The APN Restriction information element contains an unsigned integer value indicating the level of restriction imposed on EPS Bearer Contexts created to the associated APN.

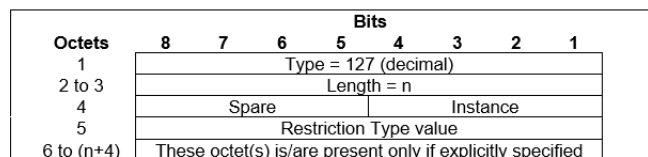The APN Restriction IE is coded as depicted in Figure 8.57-1:

Octets	Bits							
	8	7	6	5	4	3	2	1
1	Type = 127 (decimal)							
2 to 3	Length = n							
4	Spare				Instance			
5	Restriction Type value							
6 to (n+4)	These octet(s) is/are present only if explicitly specified							

Figure 8.57-1: APN Restriction Type Information Element

An APN Restriction value may be configured for each APN in the PGW. It is used to determine, on a per UE basis, whether it is allowed to establish EPS bearers to other APNs.

Table 8.57-1: Valid Combinations of APN Restriction

Maximum APN Restriction Value	Type of APN	Application Example	APN Restriction Value allowed to be established
0	No Existing Contexts or Restriction		All
1	Public-1	MMS	1, 2, 3
2	Public-2	Internet	1, 2
3	Private-1	Corporate (e.g. who use MMS)	1
4	Private-2	Corporate (e.g. who do not use MMS)	None

3GPP TS 29.274 (Ex. 10) at 155-56. Thus, the "Maximum APN Restriction" field is not the APN field recited by name in the claims and does not meet the Court's construction of "APN field."

In sum, WSOU fails plausibly to allege infringement of the '859 Patent because WSOU's sole factual allegation regarding the recited "*APN (Access Point Name) field containing information that explicitly indicates requesting either a private [or public] network address*" is premised entirely upon information not found anywhere in the APN field. The Court should

19

therefore grant judgment of non-infringement on the pleadings.

2.   WSOU's Complaint Has No Basis for Infringement of the *Activate* PDP Context Request Message of Claims 1-3, 7, 11, 15, 16, and 24

WSOU's allegations for asserted claims 1-3, 7, 11, 15, 16, and 24 are even less plausible because the APN ***Restriction*** field—the sole basis of its infringement allegation—is not even in the claimed messages. Those claims require that the "APN" field of the "***Activate*** PDP Context Request" message contains the information "requesting either a private [or public] network address." WSOU again relies on the APN ***Restriction*** field to satisfy that limitation, but the APN ***Restriction*** field is not even in the ***Activate*** PDP Context Request. The 3GPP specifications incorporated in the pleadings show the fields in the ***Activate*** PDP Context Request and ***Create*** PDP Context Request messages, respectively, and demonstrate that the former does not include the Maximum APN Restriction field that carries the APN Restriction value:

1) The MS sends an Activate PDP Context Request (NSAPI, TI, PDP Type, PDP Address, Access Point Name, QoS Requested, Protocol Configuration Options, Request Type) message to the SGSN. In this version of the

. . .

The SGSN sends a Create PDP Context Request (PDP Type, PDP Address, Access Point Name, QoS Negotiated, Negotiated Evolved ARP, TEID, NSAPI, MSISDN, Selection Mode, Charging Characteristics, Trace Reference, Trace Type, Trigger Id, OMC Identity, Protocol Configuration Options, serving network identity, Maximum APN Restriction IMEISV, CGI/SAI, User CSG Information, RAT type, S-CDR CAMEL information, MS Info Change Reporting support indication, NRSN, Dual Address Bearer Flag) message to the affected GGSN. The Negotiated Evolved ARP IE shall contain the Subscribed Evolved ARP value. The SGSN

Ex. 11 (3GPP TS 23.060 v. 10.0.0) at 187-88; *see also* Ex. 8 at 183 (identifying the APN restriction value as part of the ***Create*** PDP Context Request). Setting aside that the "Maximum APN Restriction" field is not the recited APN field, WSOU never explains how the claim limitation could be satisfied by the "Maximum APN Restriction" field when that field does not even appear in the Activate PDP Context Request Message. This Court should grant judgment on the pleadings for claims 1- 3, 7, 11, 15, 16, and 24 of the '859 Patent for this additional reason.

V.   CONCLUSION

Cisco respectfully requests judgment on the pleadings regarding the '216 and '859 Patents.

Date: September 1, 2022

Respectfully Submitted,

 /s/Brian Rosenthal, with permission by
Shaun W. Hassett
Michael E. Jones
SBN: 10929400
Shaun W. Hassett
SBN: 24074372
POTTER MINTON
110 North College, Suite 500
Tyler, TX 75702
mikejones@potterminton.com
shaunhassett@potterminton.com
Telephone: (903) 597-8311
Facsimile: (903) 593-0846

Brian Rosenthal
Katherine Dominguez
Allen Kathir
Admitted *pro hac vice*
brosenthal@gibsondunn.com
kdominguez@gibsondunn.com
akathir@gibsondunn.com
GIBSON, DUNN & CRUTCHER LLP
200 Park Avenue
New York, NY 10166
Tel: (212) 351-4000

Ryan Iwahashi
Admitted *pro hac vice*
riwahashi@gibsondunn.com
GIBSON, DUNN & CRUTCHER LLP
1881 Page Mill Road
Palo Alto, CA 94304
Tel: (650) 849-5367

Attorneys for Defendant Cisco Systems, Inc.